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REMARKS

Claims 1-108 are currently pending, and claims 12-95 are presently under consideration. Claims 16 and 69 have been amended to more clearly recite the invention. A version of all pending claims can be found at pages 2-18.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

I. Rejection of Claims 12-95 Under 35 U.S.C. §103(a)

Claims 12-95 stand rejected under 35 U.S.C. §103(a) as being obvious over Kravets *et al.* (US 6,363,377 B1) in view of Gottsman *et al.* (US 6,134, 548). Withdrawal of this rejection is respectfully requested for at least the following reasons. Kravets *et al.* individually or in combination with Gottsman *et al.* neither discloses nor suggests each and every feature of applicants' invention as recited in the subject claims.

Applicants' representative respectfully submits that independent claims 12, 18, 27, 29, 30, 38, 44, 53, 58, 67, 71-74, 81, 86, 88 and 92 relate to an invention that provides ***enhanced query results*** based at least in part upon a ***user model***. The ***user model*** of applicants' claimed invention can provide a rich representation of a user's needs based upon monitoring user actions and current tasks, specifying tasks or intentions, linguistic and/or semantic analysis, specifically typing within a query box, and/or receiving a detailed description of preferences from the user. As conceded in the Office Action, dated April 9, 2004, Kravets *et al.* does not teach or suggest enhancing query results based at least in part upon a ***user model***.

Applicants' claimed ***user model*** can be employed to specify various parameters relating to ***information highlighting*** and ***ranking of query results***. In addition, the claimed invention can be utilized to ***generate relevancy of query results based upon a computer user's interest***. Thus, the invention as recited in the subject claims employs a ***user model*** which enhances query results so that obtained results are tailored to a particular user's needs and serves as a context for the analysis of such results. Kravets *et al.* does not teach or suggest such limitations as recited in the subject claims.

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More particularly, Kravets *et al.* does not teach or suggest enhancing query results by utilizing a *model of the user's information need* as the user accesses a document. The Office Action relies on Kravets *et al.*, col. 11, lines 63-65 and col. 9 lines 52-64 to teach this limitation. However, the referenced sections disclose "when the user generates a query, the browser generates a number of related queries and sends all the queries to the search engine in parallel." Also, Kravets *et al.* discloses using a "few natural ways" to restrict or relax the original query entered by the user. These methods include locating specified query text in a certain location in a document (*e.g.* title) to further restrict a user query or locating query text anywhere in the document to broaden the user query to include more results. Thus, Kravets *et al.* discloses the ability to vary a user query based on location within text. This type of query modification is merely a slight variant to the original user query and does not involve the employment of a *user model* as recited in the subject claims.

Applicants' claimed *user model* can be employed to serve as a basis for various document analyses such as descriptions of queries, a user specified 'profile of interest', augmented versions of such descriptions created by the highlighting facility created based on further linguistic and/or semantic analysis or additional information that the highlighting facility *may collect or infer* about the *user's current task*. (See App. page 4, lines 22-27). This *user model* interest serves as a *context* for the *analysis* of the accessed or pre-fetched documents. (See App. page 4, lines 29-31). Kravets *et al.* does not teach or suggest such aspects of the claimed invention.

Instead, Kravets *et al.* discloses a method of enhancing query results utilizing a clustering technique such as hashing. (See col. 4, lines 50-57). Kravets *et al.* is simply a tool for enhancing query results using a clustering technique based upon search terms. (See Abstract, lines 3-9). Kravets *et al.* does not teach or suggest query enhancing *based at least in part upon a user model* as in the subject claimed invention.

In addition, there is no motivation or suggestion to utilize a user model in conjunction with Kravets *et al.* as recited in the subject claims. As described *supra*, Kravets *et al.* discloses "tools to aid a *user* to automatically reformulate a query" and a results organizer which "aid the *user*...in understanding and visualizing a large number of matching documents returned in response to a search query by clustering like items from the search." (See

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Abstract). Thus, the search techniques disclosed in Kravets *et al.* provide for a user to proactively modify queries employed with a search engine. There is no suggestion or motivation to employ a user model that utilizes a user's past activities and/or current tasks to create a context in which to facilitate a query as in applicants' claimed invention.

Furthermore, Kravets *et al.* does not teach or suggest allowing a *user to specify* various parameters related to *terminology highlighting*, as recited in the subject claims. For example, the user may prefer to have terminology from the original description of the information need highlighted in one color while all the synonyms in some other color. (See App. p.13, lines 10-13). In another example, the user may only want the occurrence of multi-word phrases from the request highlighted in the document, *etc.* (See App. p.13, lines 13-14). Kravets *et al.* is silent regarding *user-specified terminology highlighting* and thus does not teach or suggest such a limitation as recited in the subject claims.

In addition, *via* employment of a user model in applicants' invention, two unique users can search on identical criteria, but receive different query results because each user's model will enhance query results so that the results per user are tailored to their respective needs. In contrast, the system of Kravets *et al.* would arguably generate same query results to two different users employing identical search terms at the same time because query results are not enhanced based upon characteristics unique to each user (as expressed for example *via* a user model in applicants' invention). Kravets *et al.* does not teach or suggest employment of a *user model* representation to allow for personalization of query results as in applicants' invention.

In response to the Examiner's remarks regarding ranking of query results, applicants' representative respectfully submits that Kravets *et al.* ranks documents returned by a search engine, and such rankings are based upon the aforementioned clustering techniques. The clustering techniques focus upon *key words and/or search terms used for the query* as compared to employment of a *user model* as in the subject claimed invention. Within Kravets *et al.*, "the set of keywords from the search query are used to rank the documents returned by the search engine." (See col. 7, lines 38-40). Kravets *et al.* describes ranking of results based upon the *number of keywords* from the search query identified within the document. In contrast, applicants' claimed invention creates a model of the user's information need

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independent of a manner in which the information need is expressed (e.g., search terms or keywords). The claimed invention re-ranks query results *based at least upon a user model* - such user model can be created by monitoring user actions, specifically typing within a query box, specifying tasks and intentions, and/or receiving a detailed description of preferences from the user. (See App. p. 11, lines 2-19). Kravets *et al.* does not teach or suggest *re-ranking query results based at least upon a user model*.

Gottzman *et al.* does not make up for the aforementioned deficiencies of Kravets *et al.* with respect to independent claims 12, 18, 27, 29, 30, 38, 44, 53, 58, 67, 71-74, 81, 86, 88 and 92. Gottzman *et al.* does not teach or suggest *generating information regarding the relevancy of the query results independent of the search engine and based upon the user model* as in the claimed invention. Moreover, Gottzman *et al.* does not teach or suggest information highlighting and ranking as described *supra* regarding Kravets *et al.* Gottzman *et al.* simply discloses filtering of information based on a user model and *discarding* less relevant information. Applicant's claimed invention conducts a robust analysis of query results based on the user model to present information highlighted and ranked according to user relevancy and preferences. The combination of Kravets *et al.* and Gottzman *et al.* provides simple filtering and ranking based upon *key words and/or search terms used for the query* and does not provide a robust analysis as in the claimed invention.

It is respectfully submitted that Gottzman *et al.* and Kravets *et al.* do not teach or suggest the concept of *generating information regarding the relevancy of the query results independent of the search engine and based upon the user model* as recited in the subject claims.

Independent claims 16 and 69 have been amended to recite "*creating a context based at least in part upon a user model*" and then "*generating information regarding relevancy of the query results independent of the search engine and based upon the context.*" As conceded in the Office Action, Kravets *et al.* does not teach or suggest a *user model* as in applicants' claimed invention. Kravets *et al.* and Gottzman *et al.* do not teach or suggest *generating information regarding relevancy of the query results independent of the search engine and based upon the context* as discussed *supra*.

In view of at least the foregoing, it is readily apparent that Kravets *et al.* in view of

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Gottzman *et al.* does not teach or suggest the subject invention as recited in the subject independent claims and those that respectively depend there from. Accordingly, withdrawal of this rejection is respectfully requested.

II. Conclusion

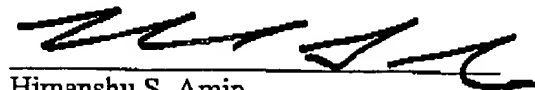
The present application is believed to be in condition for allowance in view of the above amendments and comments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063.

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number listed below.

Respectfully submitted,

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